



# MPT Expo 2025 Accelerates Innovation

Detroit show offers latest advancements in power transmission and gearing technologies

Matt Jaster, Senior Editor, and Aaron Fagan, Senior Editor

The Motion + Power Technology Expo (MPT Expo) returns to Detroit from October 21–23, 2025, bringing together a comprehensive cross-section of the mechanical, fluid, and electrical power transmission sectors. Hosted in one of North America’s manufacturing hubs, the event serves as a convergence point for engineers, technologists, researchers and decision-makers involved in the design, production and integration of power transmission systems.

## The 2025 Show

The MPT Expo provides a technical showcase of state-of-the-art solutions spanning gear design and manufacturing, electric drive systems, hydraulic and pneumatic components, motion control, and system-level integration. Over 300 exhibiting companies will present hardware, software, and process innovations relevant to the evolving demands of high-performance mechanical systems, particularly those targeting greater efficiency, durability, miniaturization, and system interoperability.

## Event Highlights

### Industry Podcast Returns to MPT Expo with New Host, Bigger Platform

The Motion + Power Technology Expo (MPT Expo) is bringing back its live podcast experience, this time with

an exciting new twist. Building on the success of its 2023 debut, the American Gear Manufacturers Association (AGMA) has named Tony Gunn as the exclusive host of this engaging on-site feature. A respected industry podcaster, influencer, and CEO of TGM, as well as director of global operations at MTDCNC, Gunn brings energy and insight into every conversation.

In 2023, thousands of attendees and exhibitors had the chance to witness podcast interviews happening live on the Expo floor, capturing insights from subject matter experts, and global industry leaders. Topics ranged from innovation and workforce development to real-world power transmission solutions. For 2025, the format is being refined with Gunn at the helm, delivering focused, high-impact interviews with thought leaders, AGMA members and experts from around the world.

“Our goal is to build on the progress from the last show and potentially connect with the hundreds of thousands of viewers and followers that Tony and his team inspire every day,” said Rebecca Brinkley, senior director, member engagement, AGMA. “We know our exhibitors, attendees, experts, and AGMA team members have important stories to tell. The modern world, as we know it, only exists because of the technology that power transmission, gearing and bearing manufacturers and suppliers produce.”

“I’m genuinely pumped to be back in Detroit this fall for the Motion + Power Technology Expo,” said Gunn. “This

is where the gearheads, the innovators and the heroes of power transmission all collide in one place to solve real-world problems.”

As manufacturers across sectors continue to navigate workforce issues, increasing global competition, and supply chain and tariff challenges, visibility has never been more important. The podcast will help amplify exhibitor voices and provide attendees with another reason to visit and engage on-site.

“MPT Expo brings the entire gearing ecosystem under one roof, and that’s rare,” Gunn added. “Hosting the podcast here means we’re turning up the volume on visibility, giving every company, big or small, a chance to be seen, heard, and celebrated on a global scale.”

## Networking Events

### Women in Manufacturing and Engineering Breakfast October 21 (7:00 am–9:00 am)

AGMA and ASM are pleased to invite all women at MPT Expo to a networking breakfast where there will be a panel of industry experts sharing experiences and advice about how to become leaders in your field and how to avoid complacency in the workforce to advocate for your own career. Join others from all sectors of manufacturing and engineering, from new employees to high-level executives, to build new relationships, grow your network, and innovate for the future. All women exhibiting or attending Motion + Power Technology Expo, the Heat Treat Conference & Exposition, or IMAT events who want to network and be inspired!

### The Materials Fusion Experience October 22 (6:00 pm–9:00 pm)

Join us for The Materials Fusion Experience, an exclusive social networking event, offering a dynamic and immersive environment for professionals to connect, collaborate, and explore the city’s vibrant history and industry. This event seamlessly blends the city’s cultural roots with modern innovation, creating a multifaceted experience designed to inspire, engage, and foster meaningful connections.

### Fall Technical Meeting (FTM) Networking Reception October 23 (6:30 pm–8:30 pm)

Join us for an evening of networking, entertainment, and connection at Corktown Taphouse. This high-energy reception brings together professionals from across the gear industry in a relaxed setting, offering a chance to meet new attendees, reconnect with colleagues, and set the stage for a week of innovation and collaboration. Enjoy interactive games like augmented reality darts and duckpin bowling, designed to spark conversation and fun. With over 70 self-pour beverage options, including craft beers, ciders, wines, and non-alcoholic choices, there’s something for everyone. Whether you’re looking to grow your network or simply enjoy a lively evening with colleagues, this event is the perfect way to start the 2025 Fall

Technical Meeting. This reception is included in FTM Full Pass registrations. Tickets are available for Single Session Passholders and MPT Expo attendees.

## Technology Preview

### CGI, Inc. Booth #311

CGI continues in its commitment to providing the latest technology with innovative new products while consistently investing in state-of-the-art manufacturing, inspection and assembly equipment. CGI is a supply chain partner from prototype to product launch and life cycle support. CGI’s engineering, manufacturing and quality departments employ the latest systems available, such as *Solidworks* with FE analysis, *AutoCad*, *CAD/CAM*, and *Infor Visual Enterprise* with ERP System. CGI implements *KISSsoft* gear and bearing software in every design application. The company strives to improve standard products as well as minimize the time from preliminary design to final design approval ready for production.



CGI serves a wide array of industries including medical, robotics, aerospace, defense, semi-conductor, industrial automation, motion control and many others. CGI is certified to ISO9001 and ISO13485 quality management systems. In addition, they are FDA and AS9100 compliant.  
[cgimotion.com](http://cgimotion.com)

### Croix Gear—Booth 613



Croix Gear has recently achieved AS9100D certification, aligning its quality management system with aerospace and defense industry standards. The certification applies



to the company's full range of manufacturing processes and reflects implementation of documented traceability, process control, and continuous improvement protocols.

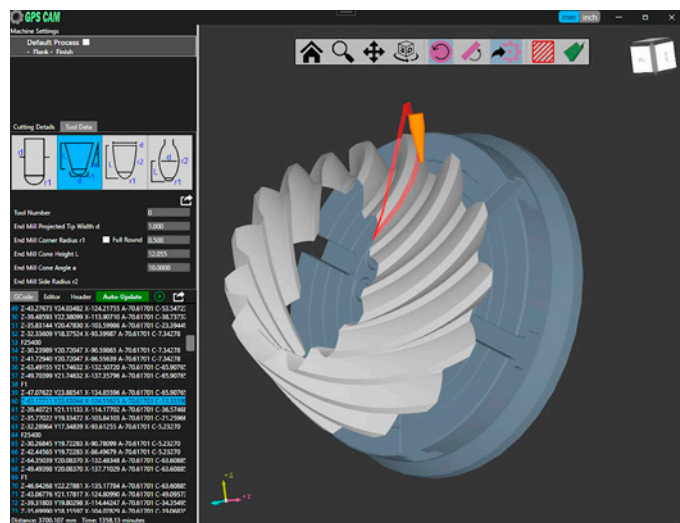
Best known for its specialization in bevel gears—including spiral bevel, straight bevel, hypoid bevel, and Zerol configurations—Croix Gear serves a range of industries requiring application-specific gear geometries and high dimensional stability. The company also produces spur, helical, internal, and worm gears and maintains capabilities for high-accuracy gear inspection and quality documentation to customer specifications.

With AS9100D now in place, Croix Gear is positioned to support more complex requirements in aerospace and defense applications, where performance tolerances, material conformance, and process traceability are critical. The company's bevel gear expertise includes precision matching, optimized tooth contact patterns, and consistent profile control across batches.

Croix Gear is exhibiting at Booth 613 at this year's Motion + Power Technology Expo. Technical representatives will be available to provide details on gear manufacturing capabilities, inspection protocols, and aerospace-related production workflows.

[croixgear.com](http://croixgear.com)

## Dontyne Systems—Booth 213



Dontyne Systems has released a second update to the *Gear Production Suite (GPS)* in 2025 to reflect the volume of recent technical additions. Originally developed in 2008, GPS integrates gear design, machining simulation, and inspection data into a single environment to identify and mitigate manufacturing issues at the design stage.

The software's Loaded Tooth Contact Analysis functionality has been extended to hypoid gear geometry. Additional design and analysis features have been introduced to support non-standard gear forms requested by users in specific application domains.

Manufacturing simulation capabilities have continued to expand. Modules for plunge shaving and internal profile grinding have been added alongside existing

processes such as hobbing, shaping, external shaving, and form grinding. The skiving simulation supports both internal and external cylindrical gears and is used to optimize tool design, machine settings, and cutting conditions over the life of the tool, including post-sharpening states. The module has been adapted for non-involute profiles and is compatible with both dedicated machines and 5-axis CNC platforms.

The honing simulation now includes analysis of contact line distribution to evaluate force balance during generation. It can also incorporate data from upstream roughing processes—such as hobbing or skiving—to improve calculation of stock allowance and breakout location at the tooth root.

The *GPS CAM* module has been extended to simulate the production of straight and spiral bevel gears using fixed tools on 5-axis CNC machines. This workflow is suited to batch production where machine utilization and toolpath control are critical. Dontyne continues to support prototyping and gear testing, providing output in the form of *CAD* models, *GPS* project files, and inspection reports.

The *Inspection Centre Module* interfaces with coordinate measuring machines (CMM) and dedicated gear inspection systems, maintaining consistent surface definitions between design and measurement. Measurement data may be imported into *GPS* for closed-loop feedback in load distribution analysis or for compensating deviations from machining processes.

A standalone inspection package, the *Dontyne On Machine Measuring System (DOMMS)*, has been introduced to perform gear geometry evaluation directly on machine platforms. *DOMMS* is compatible with multiple hardware configurations and produces measurement data that integrates with *GPS* analysis modules.

[dontynesystems.com](http://dontynesystems.com)

## Forest City Gear—Booth 419



Forest City Gear specializes in fine- and medium-pitch custom gears for critical applications in aerospace, defense, robotics, medical instrumentation, and other high-reliability sectors. The company operates two facilities: its primary gear cutting and inspection plant and a dedicated turning facility known as Roscoe Works.

The company's manufacturing capabilities include the production of spur and helical gears, involute splines, worms, worm gears, sprockets, and other cylindrical gear types. These components are produced in a wide range of materials and geometries, including small-scale parts



held to tight tolerances for use in environments with extreme thermal, mechanical, or vacuum conditions. Their gears have been deployed in terrestrial and aerospace systems, including the International Space Station and various NASA rover platforms.

Forest City Gear supports both complete part manufacturing and contract gear cutting. Under its “Make Complete” workflow, parts are manufactured from raw stock through final inspection, including material sourcing, turning, heat treatment coordination, and finish grinding. Design-for-manufacturability input is offered at the early stages of project development. The “Cut Teeth Only” workflow applies to customer-supplied blanks and includes gear cutting, measurement, and final inspection. The company maintains a tooling inventory of over 7,000 hobs and 5,000 shaper cutters, enabling short lead times on a wide range of standard and custom profiles.

Forest City Gear holds ITAR registration and maintains certifications to AS9100D / ISO 9001:2015 and ISO 13485:2016, with Nadcap accreditation for magnetic particle inspection (MPI). The company is an active member of the American Gear Manufacturers Association (AGMA).

Representatives will be available at Booth 419 to provide technical information on current capabilities, tolerances, materials, and lead time estimates.

[forestcitygear.com](http://forestcitygear.com)

### Gleason Corporation—Booth 529

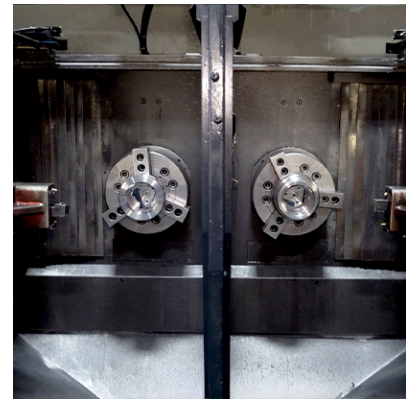
The latest release of *KISSsoft*, now integrated with the *System Module*, enables simulation of complete drive-trains at the concept stage. This system-level engineering tool supports component optimization and design validation early in development.

For molded parts, Gleason Plastic Gears combines *KISSsoft*-driven optimization with moldability analysis, custom materials, multi-cavity tooling, and advanced molding strategies such as weld-line elimination and over-molding.

Gleason Global Services rounds out its offerings with on-site demonstrations of digital maintenance platforms, lifecycle support tools, and modernization programs to maximize machine availability and long-term process capabilities.

[gleason.com/mpt2025](http://gleason.com/mpt2025)

### PAI Industries Booth #713



PAI takes a complete product approach that encompasses engineering, manufacturing, quality control, testing and assembly. They offer customers scalable production solutions. PAI’s recent investments in new technology, new equipment and state-of-the-art in-house heat treating now provides open production capacity and the opportunity to take on new customers.

With the implementation of lean concepts like 5S, Kaizen, SMED, WPO, PAI continues to make improvements and new methodologies to processes. “In the rapidly evolving gear manufacturing business, innovation is our driving force,” said Navid Yavari, PAI vice president.

[paimanufacturing.com](http://paimanufacturing.com)

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